

Remarks/Arguments

A. Status of the Claims

Claims 19 and 44 are revised, support for which can be found throughout the specification and claims as originally filed (*see, e.g.*, specification at page 5, lines 22-25).

Claims 19-44 are pending, with claims 23-24, and 44 currently withdrawn from consideration.

B. The Written Description Rejection Should Be Withdrawn

Claims 20-22, 25, 26, and 28 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly lacking written description. The Examiner appears to take the position that the claimed “outermost layer” is the electrostatically adhered peelable film. Action at page 2. From this, the Examiner concludes that the specification fails to provide written support for the peelable film having a metal fluoride.

This rejection is baseless. Claim 19 clearly states that the “outermost layer” refers to the outermost layer of the **temporary coating** and that the temporary coating can further be coated with a peelable film. The relevant portions of claim 19 are provided below to illustrate this:

- 19. An optical lens comprising:
 - (i) a temporary protective coating...comprising at least one outermost layer...; and
 - (ii) a peelable film electrostatically adhering to said outermost layer of the protective coating....

The above claim clearly and unequivocally describes a situation where the temporary coating includes an outermost layer and that a peelable film can be electrostatically adhered to the **temporary coating’s outmost layer**. In this sense, a stack of coatings exist, with the stack being a temporary protective coating having an outermost layer and a peelable film that is

electrostatically adhered to the outermost layer of the temporary coating. Applicant's specification clearly supports this interpretation:

Referring to FIG. 1, there is illustrated an ophthalmic lens 1, for example based on CR39™ (diethylene glycol bisallylcarbonate copolymer), having its convex side coated with a hydrophobic and/or an oleophobic coating (for example perfluorinated) and with a temporary outer protective coating (for example a MgF_2 layer).

According to the invention, the centre part of the temporary protective coating is coated with an electrostatic peelable film 2 comprising a main part 3 with a circular general shape and a gripping tab 4 extending from the circumference of the centre part 3 beyond the lens 1 edge.

Such a tab 4 allows the peelable film 2 to be easily removed without any risk of alteration of the temporary outer protective coating.

The lens according to the invention can be subjected to a quite conventional edging operation, except that, before the edging operation, the peelable electrostatic film should be removed, and, in a final step, a removal operation of the temporary protecting coating is to be carried out.

Specification at page 9, lines 3-17.

The Specification also explains that the temporary coating (which is separate from the peelable film) can include a metal fluoride outer layer:

Preferably, the temporary outer protective coating comprises an mineral outer layer, and more particularly, a fluoride or a blend of metal fluorides, an oxide or a blend of metal oxides or a metal hydroxide or a blend of metal hydroxides as well as a blend of such fluorides, oxides and hydroxides.

Examples of fluorides include magnesium fluoride MgF_2 , lanthanum fluoride LaF_3 , aluminum fluoride AlF_3 or cerium fluoride CeF_3 .

Specification at page 6, lines 14-20.

The only reasonable conclusions that can be made in view of claim 19 and the corresponding specification is: (1) the "outermost layer" refers to the outermost layer of the temporary coating; (2) the outermost layer of the temporary coating can have a metal fluoride layer; and (3) an electrostatic peelable film can be adhered to the outermost layer of the

temporary coating. That is, the order of the layers in claim 19 are clear and supported by the specification: lens/temporary coating/peelable film (note that additional layers can be included between the lens and temporary coating).

By comparison, the Examiner's current position on this issue is incorrect and ignores the claim language and supporting specification. The only way that the Examiner's position makes any sense is to improperly rearrange claim 19 by reading the phrase "outermost layer" to refer to the electrostatic peelable film. However, claim 19 clearly and unequivocally states that the "outermost layer" refers to the outermost layer of the temporary layer and not the peelable film.

Applicant reminds the Examiner that "[s]ome latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire." MPEP § 2173.02. Further, the written description requirement is satisfied where the specification describes "the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention." MPEP §2163(I).

Again, the only reasonable conclusion that can be made in view of claim 19 and the specification is that Applicant described in the specification a situation where the "outermost layer" of the temporary coating can have a metal fluoride layer and that an electrostatic peelable film can be adhered to temporary coating's "outermost layer." Stated another way, a person of ordinary skill in the art would reasonable conclude that Applicant had possession of a stack of coatings, with the stack comprising a temporary layer having an outermost layer and a peelable film that is adhered to the outermost layer of the temporary coating.

The Examiner's "hang-up" on Applicant's use of the word "outermost" to modify the temporary layer is unreasonable given the claim language, specification, and explanation provided above.

Finally, note that originally filed claims 1-4 provide further support that the temporary protective layer includes an outer layer that can be made of a metal fluoride and that an electrostatic peelable film can be adhered to this outer layer. This further confirms that the Examiner's position is incorrect and contrary to well-established principles. *See* MPEP 2163(II)(A)(1) (explaining that the "rejection of an original claim for lack of written description should be rare.").

In the end, the Examiner's interpretation of claim 19 is unreasonable in view of the language used in claim 19 and the corresponding specification and figures. A person having ordinary skill in the ophthalmic field would easily understand that written description exists for the temporary layer having a metal fluoride layer and that a peelable film can be adhered to the temporary layer. They are individual layers that create a stack of coatings. Each individual layer can have an outermost layer.

Applicant requests that the written description rejection be withdrawn for at least the above-stated reasons.

C. The Indefiniteness Rejections Should Be Withdrawn

Claims 19-22 and 25-43 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly being indefinite. The Examiner takes the position that the phrase "amount sufficient to provide adhesion of the lens to a holding pad" is a relative term and is therefore indefinite. Action at page 3.

Although Applicant disagrees with the position taken by the Examiner, claim 19 is further revised to address the Examiner's concerns. For instance, claim 19 now recites, in part:

wherein the temporary protective layer covers the surface of the lens in such an amount that the lens would adhere to a holding pad during edging of the lens.

The requisite degree of adhesion is now defined in claim 19. The lens surface must be covered by the protective coating so that the holding pad adheres to the lens during the whole trimming process, which means that no sliding of the lens must occur during said operation. An exemplary embodiment of this is provided on pages 5-6 of the Specification.

A person of ordinary skill in the art would understand the scope of the claimed phrase given that it is well known in the ophthalmic industry that insufficient adhesion between the holding pad and ophthalmic lens results in "a badly performed edging operation" and "pure and simple loss of the lens." Specification at page 2, lines 12-13. That is, the revised phrase provides the requisite "notice function" to one of ordinary skill in the art as to what constitutes infringement of claim 19. *See* MPEP 2173.02 (explaining that "the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent."). In fact, the specification provides the following example of sufficient adhesion between the lens and a holding pad during the trimming process:

As a result of depositing the temporary outer protective coating, a lens is obtained, being able to be edged.

This means that after the edging operation according to the method of the invention, the glass will have the required dimensions allowing to be suitably inserted into the glass frame wherein it is to be arranged.

More precisely, such a result is obtained when the lens, during the edging operation, is subjected to an offset of maximum 2°.

An optimal edging ability corresponds to a lens having an offset equal to or lower than 1°.

Specification at page 5, line 30, to page 6, line 4.

Applicant requests that the indefiniteness rejection for 19-22 and 25-43 be withdrawn for at least the above stated reasons.

The Examiner also stats that the “outermost layer of the lens of claim 19 is the electrostatically adhered peelable film.” Action at page 3. This is an incorrect interpretation. As explicitly stated in claim 19 (and further supported by the specification and figures), the “outermost layer” refers to the outermost layer of the temporary coating. The electrostatic peelable film is the external layer of the stack of coatings deposited on the lens. That is, the temporary layer is one coating (which includes an outermost layer) and the peelable film is another coating (which can also include an outermost layer), thereby creating a stack of coatings, with each having outermost layers.

The Examiner’s position on this issue is unreasonable and contrary to the language of claim 19 and the supporting specification. As explained above, the Examiner is improperly rearranging claim 19 by reading the phrase “outermost layer” to refer to the electrostatic peelable film. However, claim 19 clearly and unequivocally states that the “outermost layer” refers to the outermost layer of the temporary layer and not the peelable film. Applicant again reiterates that “[s]ome latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire.” MPEP § 2173.02. Even though it is unnecessary, if the Examiner prefers other language then let Applicant know what it is. *Id.* (“Examiners are encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own

preferences if other modes of expression selected by applicants satisfy the statutory requirement.”).

Keep in mind, however, that the original claims, specification, and figures support Applicant’s position and confirm that the Examiner interpretation is an unreasonable one. *See* MPEP § 2173.05(a)(II) (“The requirements for clarity and precision must be balanced with the limitations of the language and the science. If the claims, read in light of the specification, reasonably apprise those skilled in the art both of the utilization and scope of the invention, and if the language is as precise as the subject matter permits, the statute (35 U.S.C. 112, second paragraph) demands no more.”).

D. The Anticipation Rejection Should Be Withdrawn

Claims 19, 20, and 33-36 remain rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent 5,792,537 (“Ohlin”).

Applicant disagrees. However, in an effort to further the prosecution and secure prompt allowance, claim 19 has been revised to require that the temporary protective layer adhere to a holding pad during trimming. Applicant’s specification provides the following explanation on this issue:

As a result of depositing the temporary outer protective coating, a lens is obtained, being able to be edged.

This means that after the edging operation according to the method of the invention, the glass will have the required dimensions allowing to be suitably inserted into the glass frame wherein it is to be arranged.

More precisely, such a result is obtained when the lens, during the edging operation, is subjected to an offset of maximum 2°.

An optimal edging ability corresponds to a lens having an offset equal to or lower than 1°.

Specification at page 5, line 30, to page 6, line 4.

By comparison, the Examiner appears to be making an argument based on an inherency theory by stating that “[s]ince the ink is present, it would be in an amount sufficient to provide some degree of adhesion.” In order to prevail on this position, the Examiner will have to ultimately convince the Board of Patent Appeals and Interferences that the simple inclusion of ink on the Ohlin lens “necessarily” results in sufficient adhesion of the Ohlin lens to a holding apparatus to allow for trimming of the lens. MPEP 2112(IV)(explaining that [t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient” and that “[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.”) (underline in original).

Applicant submits that this high standard cannot be met in the present case. Although the ink marking in Ohlin can be used as temporary coating materials, it would be recognized by a person having ordinary skill in the art that the markings of Ohlin do not cover a sufficient surface of the lens to obtain adhesion to a holding pad during edging of said lens.

Applicant requests that the anticipation rejection be withdrawn for at least the above stated reasons.

E. The Obviousness Rejections Should Be Withdrawn

Claims 19-22, 25-36, and 33-36 continue to be rejected under 35 U.S.C. § 103(a) as allegedly being obvious over the combination of WO 03/057641 (“Conte”) in view of Ohlin. The primary position taken by the Examiner to support this rejection is that it would have been obvious to use the peelable film in Ohlin to protect the ink markings of Conte, “in order to ensure that the markings are protected from removal during subsequent processing, such as when the adhesive holding the lens to the holding pad during the edging process is removed, while still

providing a sufficient surface of the lens with the temporary protective layer exposed, to adhere the lens to the holding apparatus.” Action at page 5.

Applicant disagrees with this rejection. The rationale used by the Examiner to combine the Ohlin peelable film to the Conte temporary coating is faulty and would actually destroy the intended purpose of Conte’s inventive disclosure.

The following is the typical process flow for preparing an eyeglass lens starting from a lens blank:

Lens blank → marking of the lens blank with a temporary ink → surfacing (grinding, fine grinding, polishing), which provides a lens → blocking of the lens with a holding pad and a chuck → trimming/edging → removal of the temporary ink markings → mounting of the lens in a frame.

Conte and Ohlin both confirm that this is the traditional process flow (page 8, lines 3-15 and col. 2, lines 3-9, respectively). *See also* Applicant’s specification at page 1, lines 4-13.

While keeping this mind, it becomes important to consider what point in the eyeglass making process the Ohlin and Conte references actually concern. This will show that there is no apparent reason to combine these references in the manner suggested by the Examiner.

1. Ohlin

The process disclosed in Ohlin, during which temporary markings are protected, is not a trimming/edging process. Rather, Ohlin actually concerns the surfacing step (grinding/fine grinding/polishing) of the back (concave) side of a semi-finished lens, referred to as a “lens blank”¹:

¹ Applicant notes that it incorrectly argued in the previous response that the Ohlin reference discloses protection of removable ink markings during an edging process (see page 9 of the response filed April 7, 2009). Ohlin actually concerns protection of its ink markings during the surfacing of the lens (*i.e.*, grinding, fine grinding, and polishing) and not during the trimming/edging of the lens.

This application relates generally to the preparation of optical lenses for eyeglasses, and more particularly to a method and apparatus for protecting removable visual alignment markings on lenses during the grinding operation.

Ohlin at col. 1, lines 13-16 (underline added). As noted above, this surfacing/grinding step is performed prior to an edging step:

When all of the grinding and polishing operations on the lens blank have been completed, a deblocking ring is used to remove the block. The lens blank is rapped while in the blocking ring until the block falls off through a hole, after which the block may be melted and reused. Thereafter, the tape is peeled off the lens blank. Finally, the lens blank is edged to shape it to fit into a frame selected by the user.)

Id. at col. 2, lines 3-9 (underlines added).

The purpose of Ohlin's disclosure is protection of its ink markings during the surfacing/grinding step so that such markings can subsequently be used to align the lens in a holding apparatus for the trimming/edging step. That is, the ink markings are added prior to the surfacing/grinding step. The following passages from Ohlin explain this:

For certain lenses, it is necessary to provide visual markings on the lens blank so that the laboratory technician knows how the lens is to be mounted in the frame and so that the lens is properly oriented when the lens is sized and shaped to fit into the frame after it has been ground to a prescription. In the absence of these visual markings, the lens may be improperly edged or edged in such a way that the lens is mounted in the frame out of proper alignment. (col. 2, L. 10-17) (underlines added)

Such a marker remains aligned on the lens during the edging operation, but can be quickly removed from the lens when finished (...). It is therefore an object of the present invention to eliminate the added step of placing a visible marker on the lens after the grinding operation has been completed. (col. 2, L. 60-67) (underlines added)

It is another object of the present invention to provide a method and apparatus for allowing the use of visual markings on the lens which are visible in ordinary light which remain after the grinding process for proper alignment of the lens, but which can be removed quickly and readily once the lens has been mounted in the frame. (col. 3, L. 1-6) (underlines added)

Ohlin's solution is application of a peelable film or "mask" onto the ink markings prior to performing the surfacing/grinding step (col. 3, lines 20-27). The mask is removed once the surfacing/grinding step is completed and prior to the trimming/edging step:

Once the grinding and polishing operations have been completed, the tape is removed and the mask is lifted off the lens without removal of the markings. The operator can then move to the next step in the lens finishing process without the necessity of remarking the lens. (col. 3, L. 31-36)

See also col. 6, lines 7-12 (explaining that after removal of the mask "the lens can be quickly and readily inspected and aligned by the technician for edging or the lens to the proper size and shape to fit a frame in the proper orientation.").

Ohlin does not go into the specifics of the trimming/edging step. However, Conte picks up where Ohlin leaves off.

2. Conte

Conte discloses the deposition of a temporary protective layer on the convex side of lens in order to increase the surface energy of the lens so as to "obtain a sufficient adherence at the interface holding pad/lens for conventionally used pads in the technical art" (page 8, lines 31-36). That is, the Conte lens is first subjected to the surfacing/grinding step, and then the temporary coating is subsequently added:

For that, before the trimming operation, an acorn-positioning for the lens, i.e. a holding means or acorn is placed above the lens convex surface. (...)

The good lens holding mainly depends on the good adherence at the interface between the holding pad and the lens convex surface.

It has been shown that the technical problem is solved by depositing on a lens comprising a hydrophobic and/or hydrophobic surface coating a temporary protective layer imparting to the lens a surface energy at least equal to 15 mJoules/m². (page 8, lines 18-34)

See also page 13, lines 9-14 (“The temporary layer of MgF_2 coated on the convex side in the last step has then the objective to increase the surface energy of the convex side so as to be able to perform an acorn-positioning operation, i. e. for positioning said side through a holding means or acorn, thereby serving to hold the lens during the final machining operation of the lens periphery (trimming) so as to adapt it to the frame shapes”).

3. Ohlin + Conte

The Examiner’s rationale for adding the Ohlin mask onto the Conte temporary coating (that being “to ensure that the markings are protected from removal during subsequent processing”) is faulty for at least the following reason. First, Ohlin discloses that the mask is to be removed **prior to** the trimming/edging process. The reason for this is that once the Ohlin lens is surfaced/grinded and the mask is removed, the markings are used to properly align the lens onto a holding apparatus for subsequent trimming/edging. After this loading step, there no longer exists an apparent reason to protect the Ohlin ink markings. In fact, Ohlin explains that such markings need to be removed after the trimming/edging step:

[The ink markings] can be buffed off quickly and completely once the eyeglasses are ready for installation in the frame, so that the markings do not interfere with the vision of the user. (col. 4, lines 43-45)

Indeed, the central purpose of the Ohlin disclosure is to protect the ink markings during the surfacing/grinding step, not during the trimming/edging step. Stated another way, it is preferred to **not** protect the Ohlin ink markings during the trimming/edging step.

While keeping this in mind, what would be the apparent reason to add the Ohlin mask onto the Conte temporary coating, a coating that was subsequently applied to a surfaced/grinded lens? Applicant submits that there is none. Ohlin says to remove the mask prior to the trimming/edging process. The Conte lens is ready for trimming/edging. If anything, a person of

ordinary skill in the art would be inclined to avoid using the Ohlin mask with the Conte lens, as there no longer exists a need to protect the ink markings on the Conte temporary coating.

Applicant requests that the obviousness rejection in view of Conte and Ohlin be withdrawn for at least the above stated reasons.

4. The Obviousness Rejection for Dependent Claim 37 Should Be Withdrawn

Dependent claim 37 remains rejected under 35 U.S.C. § 103(a) as allegedly being obvious over the combination of Ohlin in view of U.S. Patent 5,888,615 ("Mascarenhas").

This rejection fails for the same reasons discussed in the above sections. For instance, Ohlin fails to disclose or suggest Applicant's a temporary protective layer which "covers the surface of the lens in such an amount that the lens would adhere to a holding pad during edging of the lens." Mascarenhas does not supplement this deficiency.

Applicant requests that the obviousness rejection in view of Ohlin and Mascarenhas be withdrawn for at least the above stated reasons.

F. Conclusion

Applicant believes that this case is in condition for allowance and such favorable action is requested. The Examiner is invited to contact the undersigned Attorney at 512.536.3020 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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